

# Sheep and goat production in hill and mountainous regions in Albania: Extension service and government subsidies

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**SUMMARY** – Small ruminants provide about 16% of total milk production and 31% of total meat production in Albania. Meanwhile, 47% of sheep and 55% of goat flocks are managed in hilly and mountainous regions of Albania. In these regions accounting for about 60% of Albanian territory, nearly 40% of the human population dwells, out of which 70% inhabit poor rural areas. The small ruminant farming is one of the main production activities in these regions of Albania. Sheep produce about 50.2% of total milk quantity and goats produce about 55%. Small ruminants produce nearly 48% of the meat production. Nonetheless, in these regions 36% of livestock markets, 27% of milk processing units, 29% of meat processing units, 44% of wool knitting units and 14% of refrigeration units are functioning. The production system is extensive. Animal feeding is mostly based on the utilization of pastoral reserve of the environment. The cultivated pasture feeds provide 5-10% of requirements. The concentrated feed (mainly maize and/or bran) is used at the amount of 100-150 g/day, only for one month before and after weaning. Barns for shelter are built of makeshift materials. The transhumance of animals is carried out as a common activity of owners having flocks of no fewer than 100 head. During the March-October period alpine pastures are used. The farmers having very few head do not migrate animals. They use communal pasture and forests. Pastoral reserves of spontaneous flora has not been used in an organized and managed way, generating major questions for protecting and developing the environment. Recently, this phenomenon is acquiring threatening dimensions. Because of massive emigration of young people, there are no shepherds, which are necessary for following and migrating flocks. Keeping animals at the same pasture and grazing them without criterion is ruining these land pastures. The extension service is public. The structures of this service have been set up at local level. One extension service specialist covers 3-4 communes. He transmits necessary knowledge to farmers and/or their community concerning good management farm production sources, managing animals and reproduction as well as processing products. The veterinary service (including animal vaccination) is carried out by private subjects with state support. Actually, the real possibilities of extension service structures do not match the needs. The fact that farmers are not organized in associations and insufficient work of these structures in the community indicate deficiency of this service. At the same time these regions of Albania have the lowest economic, social and cultural levels and also suffer major lacks in infrastructure and investments. The Albanian Government, supported by the International Fund for Agricultural Development (IFAD), has established the Agency for Developing Mountainous Areas (MADA). This Agency will focus primarily on activities related to animal husbandry and upgrading the extension service. Study and definition of ways for optimal utilization of human potentials and other production sources such as environment and animals, harmonious development between them, efficient implementation of extensive production systems, protection of environment and increase of farm income are objectives of this Agency.

**Key words:** Albania, small ruminants, development, public policy, less favoured areas.

**RESUME** – "Production ovine et caprine dans les régions de montagne et de collines d'Albanie : Services de développement et aides gouvernementales". Les petits ruminants fournissent 16% de la production totale de lait et 31% de la production de viande de l'Albanie. 47% des ovins et 55% des caprins sont élevés dans des régions de colline et de montagne. Ces régions qui occupent 60% du territoire albanais et hébergent près de 40% de la population humaine sont à 70% des zones rurales pauvres. L'élevage des petits ruminants est une des activités principales de ces régions. Les ovins y produisent 50,2% de leur production de lait et les chèvres près de 48%. Néanmoins, dans ces régions, seuls 36% des marchés aux bestiaux, 27% des unités de transformation laitière et 29% des unités de transformation de la viande, 44% des unités de filage de la laine et 14% des unités de réfrigération sont en état de fonctionner. Le système de production est extensif. L'alimentation du cheptel est principalement basée sur l'utilisation des ressources pastorales de l'environnement. L'alimentation à base de pâtures cultivées ne fournit que 5 à 10% des besoins. Le concentré n'est distribué (principalement du maïs ou du son) qu'à raison de 100 à 150 g/jour, seulement pendant un mois avant et après les naissances. Les bâtiments pour abriter les animaux sont rudimentaires. La transhumance des animaux est une pratique commune des propriétaires qui ont des troupeaux de plus de 100 têtes. Durant la période de mars à octobre, on utilise les pâturages. Les fermiers ayant très peu de têtes ne pratiquent pas la transhumance. Ils utilisent les pâturages communaux et les forêts. L'utilisation des réserves pastorales de la flore spontanée n'est pas gérée et organisée, ce qui constitue une question majeure pour la protection et le développement de l'environnement. Récemment ce phénomène a atteint une dimension inquiétante. En raison de l'émigration massive de nombreux jeunes, les bergers manquent, qui sont nécessaires pour

suivre la transhumance des troupeaux. La permanence des animaux sur les mêmes parcelles et sans conduite ruinent le potentiel de production de ces parcelles. Les services de développement sont publics et sont organisés au niveau local, chaque technicien couvrant de 3 à 4 communes. Les informations transmises aux fermiers et/ou à la communauté villageoise concernent les produits de l'élevage, la conduite des animaux et leur reproduction de même que les procédés de transformation. Les services vétérinaires (dont la vaccination) sont conduits par des privés avec une aide de l'Etat. Les possibilités de mise en œuvre de ces structures sont en fait très inférieures aux besoins. Le manque d'organisation collective des paysans et le manque de travail collectif montre les insuffisances de ces services. Ces régions d'Albanie, qui ont aussi les niveaux économiques, sociaux et culturels les plus bas souffrent du manque d'infrastructure et d'investissement. Le Gouvernement albanais, aidé par l'International Fund for Agricultural Development (IFAD), a mis en place une agence pour le développement de la montagne (MADA). Cette agence s'intéressera d'abord aux activités liées à l'élevage et à l'amélioration des services de développement. L'étude et la définition des moyens pour une meilleure optimisation des potentiels humains et autres sources productives telles que l'environnement et les animaux, le développement harmonieux avec une mise en œuvre efficace des systèmes de production extensifs, la protection de l'environnement et l'augmentation du revenu des fermes sont les objectifs de cette agence.

**Mots-clés :** Albanie, petits ruminants, développement, politique publique, région défavorisée.

## Introduction

Albania is located in south east of Europe with a total area of 28,000 km<sup>2</sup> out of which 24% consists of agricultural land, 36% of forest, 16% meadow and pastures and 24% of unproductive land, urban land, inland waterways, etc. (Fig. 1).

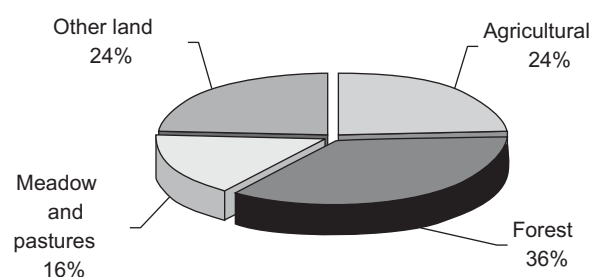


Fig. 1. The structure of land area.

The agriculture land is about 700,000 ha out of which 577,000 ha of arable land, 59,000 ha of orchards, 44,000 ha of olives groves and 19,000 ha of vines (Fig. 2).

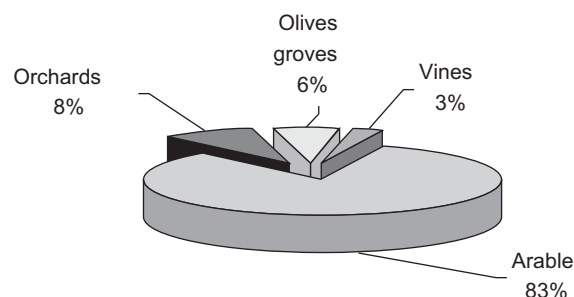


Fig. 2. Structure of agriculture land.

## Field crop production

In 2000 year only 72.6% of arable land (equally with 419,300 ha) was planted with the structure of plantings show in Fig. 3.

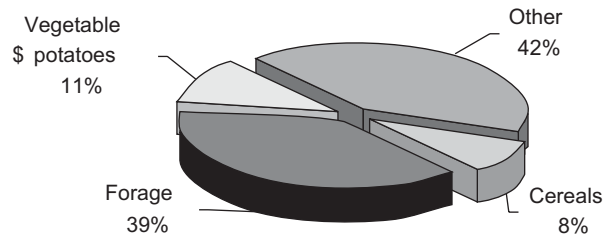


Fig. 3. Structure of plantings 2000.

The average yield of main cultivated plants are increased during, 1992-2000 years (Fig. 4), specially the forages and potatoes but still low in comparison with productive potentials of arable land and agro-climatic conditions of Albania. This is consequence of low level of agro-techniques used in small scale farms and very limited possibilities for investments.

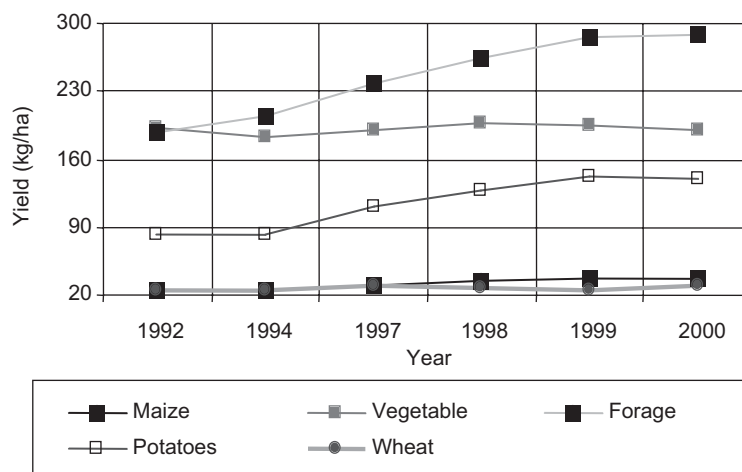


Fig. 4. Field crop yield.

### Livestock production

The number of livestock has changed until 1997 and from 1997-2000 the number has remained unchanged (Fig. 5).

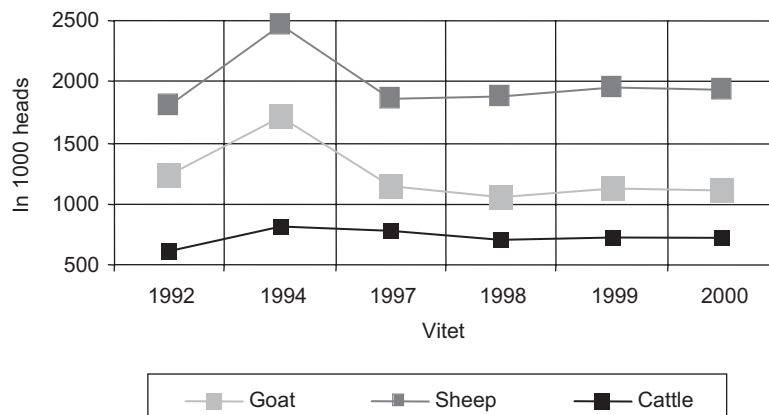


Fig. 5. Number of livestock.

The livestock production during 1992-2000 period is increased (Fig. 6).

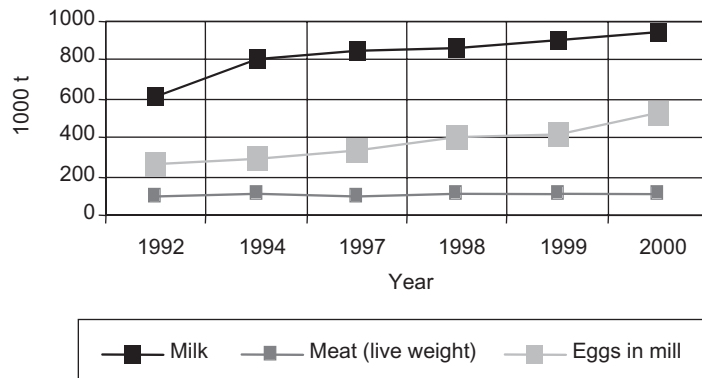


Fig. 6. Livestock production (in 1000 t).

The structure of livestock production in 2000 year is shown in Figs 7 and 8.

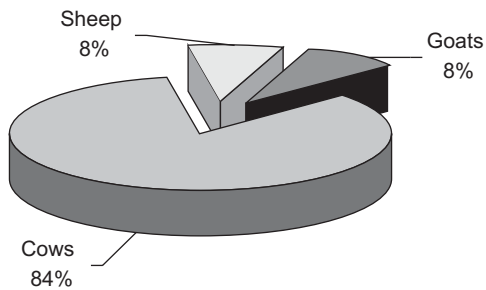


Fig. 7. Milk production 2000.

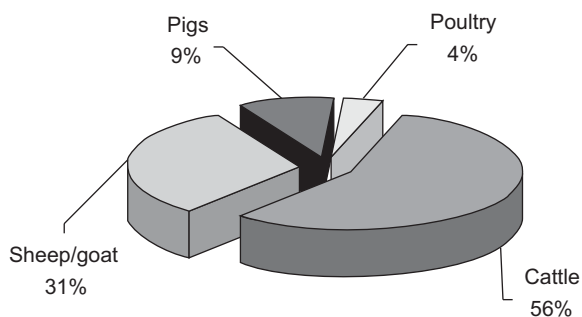


Fig. 8. Meat production 2000.

The agricultural production constitute about 65% of the gross domestic product (GDP). The livestock production accounts about 47%, the field crop 45% and the fruit trees up to 8% of total agricultural production.

## Sheep and goat production in hill and mountainous regions

### General economic data

393,000 ha of agriculture land (about 56%), 86% of Albanian forest's fund (1026 thousands ha) out of which 45.5% consists of high forest, 30% of coppice and 25% of shrubs, lies in hill and mountainous

regions of Albania. In these regions accounting for about 60% of Albanian territory, nearly 40% of human population dwells, out of which 70% in poor rural areas. The small ruminant farming is one of their main production activities. There are managed 47% of sheep and 55% of goat flocks. Sheep produce about 50.2% of total milk quantity and goats produce about 55%. Small ruminants produce nearly 48% of meat production. Nonetheless, 36% of livestock markets, 27% of milk processing units, 29% of meat processing units, 44% of wool knitting unit and 14% of refrigeration units are functioning only there. The figures mentioned above demonstrate clearly the insufficient investments of infrastructure because of the low economic and social level. This situation is not only consequence of politics of old communism system. The lack of clear strategy for the macro and micro economic development of these regions during the last 10 years of politic and economic transition period, the population and youth emigration towards the western regions and abroad have effected negatively too. In hill and mountain regions the presence of supported politics and projects for economic and social development are insufficient. There are not determined yet priorities and development strategies according to the main characteristics of these zones. There are only some private initiatives within familiar economy aiming to provide the living necessities on minimal economic and social level. The main resource of inputs for rural area families is the cultivation of 1-1.5 ha of arable land and the management of a mix heard of 1-2 cow's and 10-15 small ruminants. Only 15-20% of small-scale farms keeps 80-1000 small ruminants. The average yearly inputs for person are about 650-700 US \$.

## Sheep and goats production system

The predominant system in hill and mountain regions of Albania is the extensive one. The management of the animals is that based on traditional. The new technologies are of a little known by the farmers.

The animals have not ear tags and does not exist the structures and needed logistic for their performance control. This work is done only in some small herds and not in systematic ways. The reproducers selection is done by the farmers themselves based on their experience and their empiric intuit.

Animal feeding is mostly based on the utilization of pastoral reserve of environment. The cultivated pasture provide 5-10% of requirements. The concentrated feed (mainly maize and/or wheat bran) is used at the amount of 100-150 g/day, only for one month before and after weaning.

Barns for sheltering are built of makeshift materials.

The transhumance of animals is carried out as common activity of owners having flocks of no fewer than 100 heads. During March-October period alpine pastures are used. During the winter season the flocks immigrate in western field zones of the country. Their owners have to pay the rent of 120-160 US \$/ha. The animals are kept outdoors grazing the fields that will be planted in spring time. The farmers having very few heads do not migrate animals. They use communal pastures and forests. The use of pastoral reserves of spontaneous flora has not been done organized and managed, generating major questions for protecting and developing environment. Recently, this phenomenon is acquiring threatening dimensions because of massive emigration of young people; there are no shepherds, necessary for following and migrating flocks. Keeping animals at the same pasture and grazing them without criterion is ruining these land pastures.

Usually farmers practice only one lambing per year. A second lambing during the same year can be found accidentally.

Lots of work on sheep and goat farms is done by hand. The most labour-consuming process in sheep/goat farming, for example milking, is done manually nowadays.

Is very difficult to manage the present production system. Based on the current production system, thoroughly changed in the last ten years, we are not supplied with any scientific research or detailed description of labour organization at the farm level.

In present situation, possible means to improve sheep and goat production system in hill and mountainous regions of Albania are:

- (i) A careful study of the present production system.
- (ii) Setting up a parameters of sustainable production in local ecological and market conditions.
- (iii) Moulding of new production strategies, according the specifics conditions in different zones of these regions, for an optimal utilize of the farm's resources.
- (iv) Development and implementation of pilot-projects with participation of farmers and/or farmers' organizations.

## Extension services for the farmers

Extension service is public. The structures of this service have been set up at local level. One extension service specialist covers 3-4 communes. He is responsible to transmits necessary knowledge to farmers and/or their community concerning good management of the producing sources of farm, managing animals and reproduction as well as products processing.

This public service in the hill and mountainous regions is in the first steps and a lot of questions regarding various problems have to be answered:

- (i) Prior to starting an extension program, the farmer's practice must be well known. It is also useful to evaluate their knowledge and to better understand their attitude towards the problems they have to face.
- (ii) The training requests are huge and the information requirements are often elementary.
- (iii) The farms should be individually considered because their characteristics are very different.
- (iv) The process of build up of farmers' Association is very important as a best way to have been the project of integrated rural development.

Actually, real possibilities of extension service structures, in hill and mountainous regions in Albania are much fewer than need are. Lack of organizing farmers in association and insufficient work of these structure in community indicate deficiency of this service. As it has mentioned above, these regions of Albania have at the same time the lowest economic, social and cultural level as well as suffer major lacks in infrastructure and investments. In this condition, with the aims for the development these regions, the Albanian Government, supported by the International Fund for Agricultural Development (IFAD), has established the Agency for Developing Mountainous Areas (MADA). This Agency will focus primarily on activities related to animal husbandry and upgrading Extension Service. Study and definition of ways for optimal utilization of human potentials and other producing sources such as environment and animal, harmonious development between them, efficient implementation of extensive production system, protection of environment and increase of farm income are objectives of this Agency. An other important objective of this Agency will be the support of the farmers' initiative to create the farmers' and breeding organization as a key factor to achieve sustainability of the sheep and goat production.

In achieving the its aims the MADA will cooperate with the different research institute, the local governments and extension service structures also will the other local-NGO and foreign agency. Implementation of different methods and tools of extension will be the main activity of this Agency. Besides the seminars, instructions, one-day field demonstrations, training, leaflets, brochures, etc., the Agency will promote the constitution of pilot-farm group. Though this pilot-farms will be possible to demonstrate the new technology and knowledge. The pilot-farmers themselves play a great role in this extension. In the hill and mountainous regions the pilot-farmers will be also a key factor for demonstrate practically the way for achieved a compromise between the production objectives and the environmental constraints.

Initiating, supporting and setting up private extension service is the work started with the support of Albanian Government and MADA's Program.

## Conclusion

The small ruminants farming is one of the main production activities in the hill and mountainous regions in Albania.

The present sheep and goat extensive production system in these regions is very difficult to be manage because:

(i) The farmers' and breeding associations are new organizations with insufficient experiences and resources or they do not exist in many of zones in this regions.

(ii) Lack of well-trained people for effective management of sheep and goat production.

At present the possible means to improve production system are:

(i) A careful study of present production system.

(ii) Moulding new strategies and definition of ways for optimal utilization of human and all other producing sources, conservation and development of bio diversity and increase of farm income.

For development and implementation of extension service very important are:

(i) Evaluation of the farmers' knowledge level.

(ii) Developing the methods and tools for extension service according the social, cultural, economic and traditional characteristic in which zone of the hill and mountainous region.

(iii) Support of the activities in community and establish of farmers' and breeding associations.